

The

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## Views and Opinions.

### Points of View.

A great deal depends on point of view. And the point of view is, in turn, largely determined by habit, education, temperament—in a word, by personal equation. Psychology proves that what we *think* we see is a very small part of what we actually do see. The larger part of the image formed in the mind is really contributed by us, and not by the perceived object, the image being built up of the immediately experienced sensation *plus* the residues and memories of sensations previously experienced. Something of this nature must, I think, be held responsible for the view of the nature of the social forces held by Dr. Lyttelton, as illustrated in his article in last week's *Freethinker*. Dr. Lyttelton has been all his life a Christian. He has been in the habit of seeing "God" behind everything and through everything in such a way that phenomena are camouflaged expressions of Deity. My own prepossessions in the direction of Deity have never been of a robust character; ever since I reached years of discretion I have tried to reduce the personal equation to as small a compass as possible. What are the facts? What inferences do they compel? Not, be it noted, what theory may I frame without running the risk of refutation, but what theory ought I frame in the certainty of confirmation? And that seems to me to express the difference between the liberal religious and the freethinking point of view.

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### God and the Social Forces.

Now, let me take the case of the social forces, which Dr. Lyttelton treats as the equivalent of God, and is unable to see why I should not agree with him in so doing. And here emerges the power of the personal equation. By "social forces" I mean the sum of those relations, all the actions and reactions between human beings living in groups. Now, not having to marry these facts to a special theory, I am only concerned with their logical interpretation. And this interpretation follows the appreciation of the facts. Dr. Lyttelton being a Theist, has to harmonize the facts with a theory which precedes, and largely hinders, an appreciation of the facts. But adding "God" to the social forces gives us nothing in the shape of an interpretation of them. It does not help to an understanding in the slightest degree. Dr. Lyttelton says that if I am correct in

calling the social forces "selective," they must be alive. Well, they are alive in the sense of their being active, and as an expression of the relations between living beings; but so far as they are consciously selective, the origin of the selection lies with man, not with God. Nor does it follow that because social forces are selective they are, of necessity, good. Selection, natural or social, implies only—selection. Whether social selection acts in the direction of developing a militarized State or an industrialized one, a religious type of individual or a rationalistic one, depends upon circumstances. All I submit is that, whatever the type, it must be one that does not involve the destruction of the group. And so far as I can see, there is no more need to assume "God" behind the operation of social forces than to assume "God" behind any other group of phenomena. Dr. Lyttelton agrees with me on the operation of the social forces; will he be good enough to explain in what way their action implies God, and in what way our understanding of their operation is furthered by assuming "God"?

\* \* \*

### The Nature of Morality.

Dr. Lyttelton puts to me a number of questions, and while quite alive to the dialectical advantage of asking questions instead of answering them, my case is sufficiently strong for me to acquiesce. First, let me say I do not conceive man as possessing a deep "instinct" for good, fighting another "instinct" for belief in God. The use of instinct in this connection is to me wholly unscientific and unwarrantable. It is one of those "blessed words" that serve no useful purpose. And I certainly do not assume that we all agree as to what are truth and enlightenment. It is quite plain that no such agreement exists. All that people agree on is in calling some things good and some things bad, some desirable, and some undesirable. And when we probe the matter deeply enough we come as a basis to the psychological reaction in favour of agreeable feelings, and a reaction against painful ones. The direction of these reactions and their development into more a complex structure is, with human beings, a matter of education; in other words, the play of the social forces. It is, indeed, on this educative capacity of man, particularly in the young of the species, that the whole question of progress turns. But this capacity admits of being trained in either a desirable or an undesirable direction. On this last point I think Dr. Lyttelton would agree; the point of difference would lie in his multiplication of "instincts" and "faculties" to explain a difference of conduct or of interpretation. And from the existence of sentient material capable of expressing a reaction, through its more elaborated expression of consciously felt pleasures and pains, on to the still more elaborate development in formulated moral notions and theories, I see no need and no room for "God." Perhaps Dr. Lyttelton will say at what stage in the process "God" emerges, or becomes necessary, and what precisely is the part played by "God" in this development.



## Naturalism and Growth.

But I do believe that human society is, with lapses, pressing towards a better state. And Dr. Lyttelton thinks that in this belief I, unconsciously, concede "God." Why? On what compulsion? If I may be permitted the reference, Dr. Lyttelton will find this point worked out at some length in my pamphlet *God and Man*, and I can only repeat here what I have said there. The dice are loaded in favour of a progressive morality, because morality is fundamentally a question of social adaptation, and adaptation is the law of life, whether of ideas, of institutions, or of organisms. And what takes place in human development is not, as Dr. Lyttelton apparently assumes, the creation of new "faculties," but the transformation of existing qualities, and their application over a wider area under the guidance of wider knowledge. When nature developed a lung it did not create a new structure, it took an old one and adapted it. And what is the widest and most comprehensive humanitarianism but the gregariousness of the primitive herd expressed in a more enlightened manner over a wider area? If we stick to the facts there really is no mystery in human or social growth; these are only problems. The mystery begins, and the problems threaten to become insoluble, only when we add to the facts the unprovable and unnecessary theory of "God."

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## Art and Life and Religion.

I have space for only a word or two on Dr. Lyttelton's reference to Art, but I must not let it pass unnoticed. Religion is no more "a sustaining gift" of art than is any other form of mental activity or of social life with which artistic expression happens to be associated. Naturally, in a society where religious beliefs hold a dominating influence, artistic forms will tend in the direction of religion. Apart from the economic incentive, there is no more here than is to be seen in the fact of ethical and social life generally being expressed, in their earlier stages, in a religious form. And I may suggest, in passing, that a vital question for Dr. Lyttelton to face here is the universal phenomenon of the growing liberation of all forms of life from definitely religious influences. And why Greek art should be selected as an illustration of the power of religion puzzles me. For the improvement of art in the hands of the Greeks was due to the fact that in receiving art forms from Egypt, Assyria, and Phœnicia, it largely eliminated the religious motive, and substituted the human ideal of beauty of body and strength of mind. I cannot now pursue this point further at present, but anyone who compares the Greek statues of mythological heroes with the religious statuary that preceded it will see the truth of what has been said. And Greek art declined after, say, the days of Pheidias and Praxiteles, not because of the decline of religion (as a matter of fact, the sceptical element in Greek art and literature was always pronounced), but because of the decline of the old city life, the struggle of State against State, and the final collapse of Greece before a greater military power. If Dr. Lyttelton wishes to trace the influence of religion in art, he may see it in the degradation of art under Byzantine Christianity, or during the mediæval period; and on the other hand, its revival under the Pagan derived impulse of the Renaissance. But on the whole question I may conclude by saying that the interpretation of life in terms of religion is something that is admitted. The justification of that interpretation is the real point at issue, and I await with curiosity and interest Dr. Lyttelton's handling of that theme.

CHAPMAN COHEN.

## The Virgin Birth.

It is well known that the virgin birth of Jesus Christ is not a New Testament dogma. There is no trace of it in any of the Epistles, and two of the Gospels make no mention of it. Even the Gospels according to Matthew and Luke, apart from the passages in which such a birth is recorded as having actually occurred, contain not the remotest allusion thereto; and there is much internal evidence that even those passages were not found in the earliest copies. It is also a noteworthy fact that many present-day divines reject the doctrine of the Virgin Birth on the ground that it is not directly taught in the New Testament. While regarding the Incarnation itself as a veritable fact, they refuse to acknowledge that it was accomplished by means of a virgin birth. To us, however, the one is as inconceivable, being as contrary to nature as the other. But in the Anglican Church and in Nonconformity, there are prominent theologians who treat the Virgin Birth as a legend, if not as a myth. In a sermon which appeared in the *Church Times* for September 13, the Rev. A. E. Oldroyd, M.A., vicar of St. James's, West Hampstead, assures us that "on all counts, it will be found that those who deny the Virgin Birth will ultimately, because they must logically, make shipwreck of the Faith," a contention in which we heartily concur. If the Incarnation is an historical reality, we can see no necessity whatever to deny the Virgin Birth. If Jesus was not supernaturally born, there is no escape from the conclusion that he was a natural child. Mr. Oldroyd says:—

I scarcely dare refer to the modern revival of the ancient Jewish calumny that our Lord and Saviour was a foundling, illegitimately born to Mary while betrothed but not yet married; and that she escaped the Mosaic punishment of stoning due to an adulteress only by a long period of lying and deception, in which Joseph acquiesced, after having been "minded to put her away privily," thus conspiring, like Ananias and Saphira, to lie to the Holy Ghost.

Let us now examine the Virgin Birth in some of its essential and most important bearings. Why did the Church formulate such a dogma? The Gospel Jesus is presented now as a human teacher sent from God, now as a man endowed with supernatural powers, now as the Word which was ever with God, and which was God, made flesh in some inexplicable manner. In the Epistles of Paul, Peter, and John, he figures as the Saviour of the world, who was holy, sinless, perfect, and as God made manifest in the flesh, who loved mankind and gave himself up for them. Thus, before the New Testament closes, the man from Nazareth has evolved into a Divine Being tabernacling in human nature, who, notwithstanding this alliance, knew no sin. But human nature is in a state of depravity, the victim of original sin. The innate sinfulness of our race is a fundamental article in the Christian creed. The following is the Pauline portrayal of the natural man:—

As it is written, There is none righteous, no, not one; there is none that understandeth, there is none that seeketh after God. They are all gone out of the way, they are together become unprofitable; there is none that doeth good, no, not one (Romans iii. 10-12).

Such is the Pauline doctrine of man. Every child of Adam inherits a corrupt, debased, nature, and is doomed to everlasting perdition. There is no exception, and Nature offers no way of escape. Left to his own resources, every human being is both fallen and lost beyond all hope of recovery. But no sooner was Jesus conceived of as the Saviour of humanity than the idea of his own absolute sinlessness suggested itself. Paul declares that though born of a woman he "knew no sin," and Peter



describes him as "a lamb without blemish and without spot," "who did no sin, and in whose mouth was found no guile." The cult-makers went further still and affirmed that he was, not only without sin, but incapable of sin. Even his impeccability became an article of the growing Faith. And yet he was true man as well as true God. Now, the question was how he could share our nature without sharing our sinful inheritance? It was in order to get over this difficulty that the notion of a virgin birth was adopted. We say "adopted," because all the great Saviour-Gods of Pagan mythology were believed to be virgin born. Adonis, Attis, Dionysus, Osiris, and Mithra, were archetypes or models closely followed by the founders of the Christian religion. As a matter of fact, Christianity cannot justly lay claim to any real originality. The world had teemed with Saviour-Gods for thousands of years before Jesus was ever heard of. The problems which Christian divines were called upon to solve were of secondary importance only. For example, they had to explain *how* Jesus escaped human sin by being born of a virgin, which was by no means an easy task.

Of course, virgin birth, as such, would not secure sinlessness, much less impeccability, because a virgin is as much a human being as a man. Mr. Oldroyd says that "in normal generation the mother supplies the matter, the father the active principle, and a new human person comes into existence round which this matter forms." Since the mother is by nature impure and sinful, the matter which she supplies necessarily partakes of her constituent qualities. The first explanation of the sinlessness of Jesus was wholly inadequate. The Fathers declared that he was without sin because the Holy Ghost had contributed "the active principle" of his personality, but they forgot that his mother, though a virgin, was still a sinful human being, and could not help imparting to him her own sinfulness. Mr. Oldroyd frankly admits this, saying that "the Blessed Virgin Mary supplied the whole human nature—body, soul, and Spirit"—of Jesus Christ, which nature could have been no other than blighted by original sin, although "the active principle" was supplied by a Divine Being. Birth of a woman was unavoidable, but birth of a woman meant a sinful inheritance. During the Middle Ages, and down to the latter half of the nineteenth century, the divines utterly failed to agree on any theory that would fully account for the absolute perfection of character almost universally claimed for the God-man. The theory advocated by many was that known as the Immaculate Conception of the Virgin Mary; that is to say, her absolute immunity from the sin of Adam as the result of the miracle of her own sinless conception in her mother's womb. Milman tells us that neither St. Bernard nor St. Thomas Aquinas accepted such an absurd theory. He says:—

It became the subject of contention and controversy, from which the calmer Christian shrinks with intuitive repugnance. It divided the Dominicans and Franciscans into hostile camps, and was agitated with all the wrath and fury of a question in which was involved the whole moral and religious welfare of mankind. None doubted that it was within the lawful sphere of theology. Wonderful as it may seem, a doctrine rejected at the end of the twelfth century by the last Father of the Latin Church has been asserted by a Pope of the nineteenth, and a Council is now sitting in grave debate in Rome on the Immaculate Conception (*History of Latin Christianity*, vol. ix., pp. 75-6).

The Pope referred to was Pius IX., who also promulgated Papal Infallibility. The Immaculate Conception of the Virgin Mary was proclaimed on December 8, 1854, after many centuries of fierce controversy; and

after all it is but a theory which lies wholly outside the sphere of verification. We caudly admit that the immaculate conception of Mary is not one whit more incredible than the virgin birth of Jesus, and surely those who believe in the latter ought not to boggle at the former. Again, a virgin birth is quite as unthinkable as an incarnation of God, and we can see no reason why those who firmly hold the latter should experience any difficulty in accepting the former. To us both are equally unbelievable and absurd, the Christian Saviour-God being every bit as mythical as Pagan Osiris, Adonis, Attis, Dionysus, or Mithra. A glance at the state of Christendom at this moment would convince any unprejudiced, fair-minded person that the Christian Redemption is as gigantic a farce as those found in Pagan mythology. The Virgin Mary and her son belong to precisely the same category as Isis and her son Horus.

J. T. LLOYD.

### The Task of Freethought.

Rip Van Winkle fell into a stupor, and slept twenty years, to find his beard and all the world about him quite changed.  
—*Nuttall's Encyclopædia*.

There is nothing else in history but the fight between freedom and tyranny.—*Arnold White*.

MR. J. F. RAYNER, a friendly critic, in a letter published in the *Freethinker*, says that "after thirty years' absence" he has rejoined the National Secular Society, and finds that it has made no progress "either in the extent or style of its propaganda." He adds further that if "ethical and social activities," as seen in the Churches, were associated with Secularism the cause would benefit.

It may be owing to Mr. Rayner's "thirty years' absence" that he has overlooked or forgotten the ideals aimed at by the National Secular Society, but it may be well to mention that its objects are to dispel superstition; to spread education; to disestablish religion; to rationalize morality; to promote peace; to dignify labour; to extend material well-being; and to realize the self-government of the people.

This is a fairly lengthy and ambitious programme for any single organization, even if supported by large resources, which the National Secular Society does not possess. Freethought is a poor, struggling cause, its members are comparatively few and scattered; and it has no wealthy endowments to defray the cost of a national propaganda. Still, the Society has kept the flag flying bravely for fifty years, and it has managed to relieve its necessitous members. The Benevolent Fund has, during its existence, been well supported, and is, probably, the only fund which is administered without a single farthing of expense. Until a very short time ago it was not possible to bequeath money for Freethought purposes with any real prospect of the trust being carried into effect, as it was always in the power of the next-of-kin to invalidate the legacy on the ground that it was illegal. The famous Bowman Case altered this, but Freethought was robbed of thousands of pounds before this memorable legal victory.

During Mr. Rayner's "thirty years' absence" two Presidents of the National Secular Society have died from the overwork and anxiety inseparable with such an onerous office. Despite the undeniable fact that the Freethinkers have compelled the clergy to refrain from thrusting their more repulsive dogmas on the public, the fight between Freethought and Superstition is by no means over. We have not yet succeeded in eliminating the clergy from our national councils, nor from our schools. In both these places the clergy still wield great



power. There are not wanting signs that Church and Chapel may yet combine their efforts against the common enemy, and a recrudescence of superstition may yet cause us need for greater vigilance and activity in the near future.

Mr. Rayner complains that, during his thirty years in the wilderness, we have "made no progress." Surely, great changes have taken place. In the stormy days of Charles Bradlaugh the Freethought audiences were almost entirely composed of men, whereas, to-day, there are as many ladies as men. The literary appeal has been broadened, as anyone may see by comparing the later issues of the *Freethinker* with the earlier, or by contrasting the present-day Freethought publications with those of the earlier period. Thanks to the courage and devotion of Freethought leaders, heterodoxy is no longer the disgrace it once was to the citizen. Thirty years has added respectability to Freethought advocacy, placed its exponents on a strong platform, organized its forces, justified its rights to equal citizenship. Through the religious prejudices of our time a breach has been made large enough for the heretic to pass through in future, and in many other directions our lives have been made easier.

The "social activity" of Christians is not always entirely benevolent. Let Mr. Rayner ponder over the case of Stephen Girard, the American Freethinker. At his death, this large-minded and large-hearted man left substantial bequests to charities, the principal being a munificent endowment of an orphanage. By express provision in his will, no ecclesiastic, or minister of religion, was to hold any connection with the college, or even to be admitted as a visitor, but the staff of the institution was required to instruct the pupils in secular morality, and leave them to adopt their own opinions. This will has been most shamefully perverted, for the officials are all Christians, and, in order to keep within the letter of the law, only laymen are so employed. To-day the Girard Orphanage is pointed at as a proof of Christian philanthropy.

If Freethinkers do their own thinking in religious matters, they also do it in everything else. Spiritual and temporal authority are brought under the same rules, and they must justify themselves. Freethinkers are thus social reformers, and they are almost to a man on the side of justice, freedom, and progress. To make a new world, no audacity contributes that is not in the first place intellectual. Man's great need is boldly honest minds.

As for imitating the "social activities" of the Christians, Mr. Rayner should know, as a Freethinker, that whilst charity is very good in its way, what the world wants is justice. If the world were run on fair and reasonable lines, there would be no occasion for philanthropy to exist. Christian charity is largely a bribe to the working classes to keep them in order, and to attract them into the churches and chapels. In India and elsewhere, the missionaries bribe the natives with medical dispensaries, and at home the clergy use the lure of coals and blankets, soup kitchens, children's nurseries, Sunday-school "treats," Pleasant Sunday Afternoons, and other attractions. The cash-box and the cassock have always been on the same side, and will be to the end of the chapter. So long as wealthy men have "surplus" thousands derived from underpaid labour wherewith to found and endow churches and chapels, so long will "religion" be necessary to keep people quiet, and so long will thousands of places of worship mock the few lecture-halls devoted to Rationalism.

"Where's yer orspitals and lunatic asylums?" is a very old jibe of Christian advocates. Freethinkers need not trouble about this sneer. In common with their

fellow-citizens, they contribute to their support. Maybe, Christians have a special interest in lunatic asylums. They may subscribe to them; certainly they help to fill them.

Freethought is not a religion, nor a substitute for superstition. It is not concerned chiefly with social reform as such; but it is actuated by the pure love of truth, and is justified in bending its whole energies on the destruction of delusions, ecclesiastic and supernaturalistic. Its mission is to free mankind from ancient error, and in so doing it is rendering a service to the human race. Human nature does not need a supernatural religion, does not need an other-world superstition. It needs to be freed from the shackles of clerical control, and it will then adjust itself naturally to the real conditions of life, material, physiological, and social. Although no ideal perfection may ever be reached, men will be all the happier for having escaped the control of the clerical caste. To be true to truth is man's first duty, and from it all other duties will be told. As truth-seekers, we live for the highest. This is the heroic life; and, as Meredith says finely:—

Though few,  
We hold a promise for the race  
That was not at our rising.

MIMNERMUS.

## A Search for the Soul.

### XII.

(Continued from p. 497.)

IN November, 1916, the Central Control Board (Liquor Traffic) appointed an Advisory Committee "to consider the condition affecting the physiological action of alcohol" on the human organism. This committee consisted of eight distinguished physicians, with Lord D'Abernon as chairman, who finished their labours in December, 1917—the conclusions given in the report representing the unanimous judgment of all the members. Among the latter were: the Principal Medical Officer to the Board of Education, the Professor of Pharmacology at University College, the Pathologist to the London County Asylums, the Professor of Physiology in the University of Oxford, and the Medical Superintendent of the Rampton State Asylum.

With regard to the matters which this committee investigated I have nothing to say here; the only point to which I wish to draw attention is that it is tacitly assumed throughout the report that the so-called "mind," which is shown to be affected by the use of alcohol, is nothing more nor less than the sum of the functioning of different parts of the brain—the lower portion of that organ being common to other members of the animal kingdom, and the higher portion, that of the frontal lobes, being found only in man. Bearing these facts in mind, I will now quote two paragraphs from the book I have referred to—*Alcohol: its Action on the Human Organism*:—

Alcohol undoubtedly diminishes the control of the intellect and the will over the emotions, and successively weakens and suspends the hierarchy of functions of the brain, and therefore of the mind, in the order from above downwards; that is to say, in the inverse order of their development in the individual and in the race. For the emotional dispositions or capacities are a very ancient racial endowment and have their seats in the basal ganglia, the lowest levels of the great brain, the part which alone is represented in the brains of the lower vertebrates. The higher intellectual faculties, on the other hand, are the latest acquired, and are connected with the anatomically highest and last developed parts of the brain. Intermediate between these come, in the



order of development, the sensory and skilled motor functions (and their nerve centres).

Now, of all the intellectual functions, that of self-criticism is the highest and latest developed, for in it are combined the functions of critical judgment and of self-consciousness, that self-knowledge which is essential to the supreme activity we call volition or deliberate will. It is the blunting of this critical side of self-awareness by alcohol, and the consequent setting free of the emotions and their instinctive impulses from its habitual control, that give to the convivial drinker the aspect and the reality of a general excitement. In the mature and well-developed mind, this interplay of thought and emotion goes on under the checking and moderating influence of self-criticism; in social intercourse, especially, it is constantly checked by the thought of the figure one cuts in the eyes of one's fellow-men. In proportion, then, as alcohol hampers the mechanism of self-control, the liberation of intellectual or emotional effects goes on at a higher rate (p. 32).

In the foregoing paragraphs it cannot fail to be perceived that the members of the Advisory Committee are all in perfect agreement upon the question of the localization of mental functions (or so-called "psychical states") in the brain—that is to say, they are firmly convinced that all mental functions are associated with definite regions of that organ, so that what is called Mind is but another name for the phenomena produced by the functioning of different parts of the brain. We thus arrive at the indubitable fact that mental functions are materialistic.

Let us now look at a typical case in which whisky affects "the mind." The first effects of this spirit is perhaps a slight giddiness or lightheadedness, after which the drinker begins to feel a sense of careless well-being or bodily and mental comfort. Soon his conversation and actions become less constrained; he has a free flow of ideas, and becomes witty, lively, or satirical. He experiences, perhaps, a revival of old feelings which had seemed to have passed away for ever. All his emotional nature is in an agreeable state of excitement; he can become angry or compassionate according to the appeal of the moment. He laughs and smiles or makes jovial remarks, and becomes careless of the impression he is making on the company. He no longer thinks of weighing his words or acts, and laughs idiotically at the mere ghost of a joke. He feels an inordinate self-satisfaction at his own sayings and doings, and likes to hear himself talk. He sometimes becomes of an argumentative frame of mind, and freely gesticulates in laying down the law. His ideas, a little later, appear to get mixed, and to follow one another without order; while his speech becomes more or less incoherent. Later on, a feeling of depression overtakes him, and he is plunged into maudlin melancholy, from which in due course he sinks into a heavy stupor, and sleeps the sleep of the blessed.

That it was the whisky which produced all the abnormal effects here described is undoubted; the only question to be considered, then, is how the so-called "mind" could be thus affected. Let us see. After a dose of alcohol has been swallowed, about one-fifth of it is absorbed into the blood from the stomach. In the uppermost part of the small intestine about one-tenth more is absorbed, leaving seven-tenths to be accounted for. Of this more than half is absorbed in the middle part of the small intestine, and the remainder in the lower portion of that alimentary organ. Unlike ordinary food-stuffs, alcohol does not require to undergo digestion; it therefore makes its way rapidly into the blood. Being now a constituent of that vital fluid, the alcohol is carried by the circulation to every part of the body; but the only organs upon which it appears to have any particular effect are those of the central nervous system—

by passing from the blood into the cerebro-spinal fluid, which bathes the brain and spinal chord.

We thus arrive at the fact that the alcohol in the whisky imbibed comes into direct contact with the brain, upon whose sensitive substance its narcotic or intoxicating principle exercises more or less effect, according as the individual happens to be an occasional or a regular drinker. But how does the spirituous property of alcohol affect the Mind? If what is called "the mind" be an immaterial "entity" apart from the brain, it is not touched at all, and could not therefore be affected in any way by any amount of alcohol. That it *is* so affected, however, simply proves that Mind is *not* what Dualists represent it to be; that it is, in fact, something produced by the functioning of the brain, and that the latter process is to a certain extent impaired by the influence of alcohol upon it. The portion of the brain chiefly affected appears to be that which was latest acquired, and which is found only in man—that of the greatly developed frontal lobes. Hence, the controlling and restraining effects of the latter upon the functioning of the other regions is relaxed, and the drinker feels free to give the reins to his emotional and lower animal nature without let or hindrance, and so becomes for the time being a different creature. If the mind were an entity separate from the body, this could not occur.

(To be continued.) ABRACADABRA.

## Acid Drops.

Talk about cheek! Here is the Bishop of London requesting the Lord Mayor to summon a meeting of laymen to consider how to place the finances of his diocese on a sound basis. This means, of course, a request that they will contribute more. Suppose the meeting suggests that the Bishop drops, say, nine out of his ten thousand pounds per year, just as a beginning. Will he do it? All we have heard of him is that he has invested his surplus money in War Bonds. But as this brings him in five per cent., his piety and patriotism is not of an unprofitable character. Some of the clergy, says the Bishop, hardly know how to get through the winter owing to the cost of living. We know of others who are in the same plight, and who do not believe in prayer or Providence. The Bishop pleads that he has the oversight of a million people. We think ninety-five per cent. would cheerfully dispense with his supervision.

Miss Maude Royden, the lady preacher at the City Temple, intends offering facilities for questions and discussion after the sermon. Now, that is a good step; but we doubt if it will last for long. It has been tried before, but invariably given up as being dangerous. It usually begins on the assumption that the questioner is simple-minded and uninformed. When it is discovered that the questioners have a position of their own and "make good," the policy is quickly changed. It is only the Freethought platform that maintains the policy of open discussion.

The Vicar of Heptonstall caused a mild sensation at the Parish Church on a recent Sunday by dismissing the congregation on account of talking going on in the church. In the midst of his sermon he pronounced the benediction, and brought the service to an end. That particular "benediction" must have been somewhat like the well-worn expletive of the villain of melodrama, "I love you; curse you!"

The "Holy Land" is being found out by our soldiers, and they are not all enthusiastic concerning its sacred attractions. A correspondent, writing in the *Daily News*, says:—

Wherever the idea originated of consigning people to Jericho, no one who has been in the Jordan valley this summer will quarrel with the suitability of the selection. Day in, day out, the thermometer registers from 105 to 125 degrees in the shade. Dust, flies, and mosquitoes are terrible plagues. Very unpleasant, too, are the snakes.



Many people laughed when they read that the London County Council was running a "school of politeness" for waiters. We should smile, too, if we heard that the Christian Evidence lecturers were compelled to attend.

Some pointed remarks on Church War-memorials appeared in the *Southend Standard*. The editor says: "I am against all sectional efforts. The sentiment of the locality demands that any monument to their memory shall be something equally pleasing to Protestant and to Catholic; to Socialist and to Conservative; something in which the whole of the community has played a part; truly a town's memorial." This is a retort courteous to all those dear clergymen everywhere who wish to add stained-glass windows, side-chapels, and ecclesiastical sculptures to their churches under the pretence of erecting War-memorials to the fallen.

The clerical wheeze, "After death, what?" has no terrors for the Government official. Mr. J. M. Hogge, M.P., speaking at Liverpool, quoted from a letter to a discharged soldier, issued by the Pensions Ministry, informing the soldier that he was to receive "19s. 6d. for life, at the expiration of which you will again be medically examined with a view to consideration of your claim for further pension."

The neglect of science in this country is extraordinary. During the four week's opening of the King's College Scientific Exhibition no member of the Government nor any representative of a State Department officially visited the exhibition or referred to it. Had it been a missionary exhibition or a Bible society show the place would have been crowded with Government officials—admirals and generals.

A foot-note to Mr. Cohen's new book on *Christianity and Slavery* is to be found in Cecil Torr's *Small Talk at Weyland*, in which, in a letter written in 1849, it is stated that farm labourers "were put up to auction by the parish authorities and hired for sixpence to ninepence per day."

What sheer nonsense some divines do write and talk these days. A Dr. Morgan, of America, "regards Germany as personally guided and directed by Satan." The barbarism into which she has lapsed is so cruel, so ruthless, so dehumanized that this godly man can only describe it as the outcome of "demoniacal possession." The Americans, too, must mend their ways, or their "win-the-War" methods will be vain, their "sins of avarice, intemperance, immorality, graft, materialism, Sabbath desecration, profanity," crying aloud for heaven's vengeance. The only hope of winning the War is by making "the day of prayer the habitual attitude of mind and heart on the part of our people." Dr. Morgan is not far behind the Bishop of London in the art of trampling under foot the Christian commandment, "Love your enemies."

The *Daily Chronicle* estimates the number of regular book-buyers in this country at 50,000. As only a portion of this number is interested in serious literature, it says little for the national intelligence. Maybe, that is one of the reasons why the country is still under the influence of an Oriental superstition and a clerical caste.

An interesting trophy from Mesopotamia is now to be seen on the Horse Guards' Parade, London. This is a bronze Persian gun, weighing about five tons, captured by the British on their entry into Baghdad. The inscription on the gun reads: "Succour is from God." This reminds us of the advice of Cromwell to his men: "Trust in God, and keep your powder dry."

According to the newspapers, the Archbishop of Canterbury has joined the National Alliance of Employers and Employed. Does this mean that organists, choristers, vergers, and other Church workers are to receive a living wage?

"A War Widow" writes to the *Leeds Mercury* commenting on the Vicar of Marsden's complaint that the value of his

living has been reduced owing to the prevailing high prices. This lady points out that the wives of soldiers have had their incomes reduced owing to their husbands being in the Army, and still have to face the higher prices. She adds that, instead of the War making people less selfish, the world seems "more selfish than ever, and it begins largely at the church, the place where people expect a better example." That should make the Vicar of Marsden reflect a little.

The unsettled state of Irish affairs reminds one of a slip made by the Duke of Wellington during a House of Lords' debate on Ireland. In the course of his speech he mentioned that two clergymen had been murdered in Ireland. A noble lord on the opposite side of the House rose at once to correct him: "No, no, only one." "Only one," rejoined the Duke, "Well, if I am mistaken, I am sorry."

Rev. Mr. McLean, of the South Indian United Church, speaking at the annual missionary meetings at Hamilton said the War had been a great stumbling-block to religion in India. The natives there asked: "Was not the German rajah Christian also?" I am afraid the Rev. Mr. McLean will find the War has been a great stumbling-block to many at home who used to profess Christianity. The beliefs and actions of Christians don't always square with one another.

Discontent seems to be rife amongst the Scottish Churches at present, else why the numerous calls from the Lord to other spheres of labour?

Mary Mullins now knows what value to place on the charity of Holy Mother Church. Two years ago she came from Ireland to Glasgow. Lately she got into trouble, and finding her baby an embarrassment in getting employment, and she herself absolutely destitute, she placed her infant with a bottle of milk beside him on the floor of St. Andrew's Pro Cathedral, Glasgow, in the hope that some charitably disposed worshipper would take care of the child. In this she was mistaken as the baby was handed over to the parish authorities and she herself traced and sentenced to two months' imprisonment.

Priests are the same everywhere. The Archbishop of Paris officiated at a service in the Church of St. Genevieve, expressing gratitude for the preservation of the French capital from the Germans. A marble plaque has been erected to the "saint" for services rendered. Yet the saviours of Paris were live soldiers and not plaster images.

A minister had been waiting at a Scotch station for a train from the North, and looked more than usually unhappy. Suddenly a woman, one of a group of mourners on the platform, approached him and said: "Excuse me, are you waiting for the corpse fra' Stirling?"

Writing on the fascinating subject of "hair-cuts," a contributor to the dear *Daily News* refers to the Jewish prophet Elisha. The Bible tells us that this delightful old savage was "thin on the thatch," and some children called to him: "Go up, baldhead." The prophet fetched some hungry bears, who promptly gobbled up the children. Truly a salutary lesson of the evil effects of poking fun at a "man of God"; but what stuff to retail to children in a civilized country?

A publisher's announcement states that in a new book, "Colonel Roberts gives a deeply interesting analysis of our conception of life and death from the creation to the present day. It is refreshing to find one modest man in these pushful days.

A writer in the *Daily Express* suggests that curates might go on strike for increased pay. Well, we consider they would be quite justified in doing so where they are not getting a "living wage." Those who want curates ought to pay for them. The only difficulty we see is that the public in that case might dispense with them altogether. In any case, we cannot conceive any general enthusiasm being worked up on their behalf.



**C. Cohen's Lecture Engagements.**

September 29, Southampton; October 6, Manchester; October 13, Swansea.

**To Correspondents.**

- J. T. LLOYD'S LECTURE ENGAGEMENTS.**—September 29, Birmingham; October 6, Leicester; October 13, Maesteg; October 20, Southampton; November 3, Manchester; November 10, Sheffield; December 1, Swansea.
- T. C. LANGRIDGE.**—You are not "worrying" us in the least. You will find some instructive pages on the colouration of animals in Dewar and Finn's *The Making of Species*. The point for a student to bear in mind is that while the general fact of evolution is demonstrably true, there is no room for dogmatism on the factors, or of their relative values. Sorry we are too busy in other ways to write at length on this subject—at least for the present.
- H. ROBERTS (Christchurch, N.Z.)**—There is something in what you say, and we will bear the matter in mind. *The Bible Handbook* would give what you require, but that, for the time, is out of print. We shall reprint as early as possible.
- GEO. W. ROGERS.**—The celebrated line in Lucretius runs thus in English: "To such vile deeds can religion persuade men"—such vile deeds as the slaughter of the modern Iphigenia on the altar of Artemis.
- T. WADSWORTH.**—Thanks for compliment. We have done our best.
- R. BELL.**—If you will send to the office, we will enclose in some of the parcels we are sending out weekly to France and other parts of the fighting line. We have every reason for believing that the discussion with Dr. Lyttelton is attracting considerable attention.
- E. TRUELOVE.**—Whether there is a "good round sum left in hand to meet future expenses" remains to be seen. There will certainly be something. Our readers are in earnest, as you will see.
- J. F. AUST.**—The author of the lines is Alexander Pope. Sorry your paper went astray, but the post nowadays is rather uncertain. Have sent on copy.
- D. TURNBULL.**—Thanks for name of new reader for paper, which is being sent. We hope the treatment will be effective; it generally is, save in the most obstinate of cases.
- The Secular Society, Limited, office is at 62 Farringdon Street, London, E.C. 4.*
- The National Secular Society's office is at 62 Farringdon Street, London, E.C. 4.*
- When the services of the National Secular Society in connection with Secular Burial Services are required, all communications should be addressed to the Secretary, Miss E. M. Vance, giving as long notice as possible.*
- Lecture Notices must reach 61 Farringdon Street, London, E.C. 4, by first post Tuesday, or they will not be inserted.*
- Orders for literature should be sent to the Business Manager of the Pioneer Press, 61 Farringdon Street, London, E.C. 4, and not to the Editor.*
- All Cheques and Postal Orders should be crossed "London, City and Midland Bank, Clerkenwell Branch."*
- Letters for the Editor of the "Freethinker" should be addressed to 61 Farringdon Street, London, E.C. 4.*
- Friends who send us newspapers would enhance the favour by marking the passages to which they wish us to call attention.*
- The "Freethinker" will be forwarded direct from the publishing office to any part of the world, post free, at the following rates, prepaid:—One year, 10s. 6d.; half year, 5s. 3d. three months, 2s. 8d.*

**Sugar Plums.**

To-day (September 29) Mr. Cohen opens the seasons lecturing at Southampton with two lectures in the Waverley Hall, St. Mary's Road, morning, at 11, "The Savage in Our Midst"; evening, at 7, "The New World and the Old Religion." We hope Freethinkers will do their best to advertise these meetings among enquiring Christians.

The Birmingham Branch made a good start with its season's work last Sunday. Owing to the very heavy cost of getting posters printed and posted, these were dispensed with on this occasion, which made the meetings the more gratifying. And there was a record sale of literature, which

bore witness to the interest felt by the audience. To-day (Sept. 29) Mr. J. T. Lloyd lectures in the Repertory Theatre at 7, on "The Value of the Bible in National Life," a reply to Rev. Campbell Morgan. We hope to hear of the theatre being crowded.

"B. F. B.," in subscribing to our Sustentation Fund, says: "When I think that I have lived in this country fifty-three years, and am now an old man, I consider it a hard fate that I became acquainted with the existence of your paper only three years ago." It is a hard fate, and we believe there are many thousands in the position in which "B. F. B." was, and who would count it a favour to make the acquaintance of the *Freethinker*. Those who read this paragraph should do their best to remedy a state of things that calls for redress. Last week's printing order reached a record figure, but we can do with more readers.

Miss K. B. Kough lectures to-day (September 29) at the Secular School, Pole Lane, Failsforth. Her subject in the afternoon, 2.45, is "Are We Still Savages?" and in the evening, at 6.30, on "Marriage: As it was, As it is, and As it might be." Pole Lane, Failsforth, is to be reached by tram ride from Manchester, and no doubt many Freethinkers from there will make it a point of attending.

One of our soldier-readers gives us his experience of Army life as under:—

I joined the National Reserve in October, 1914 (I am now fifty-five years old), and when attesting I pointed out that I was an Atheist, the regimental sergeant major, fortunately, was present, and immediately took me on one side and swore me in by affirmation; but when being transferred to other Companies I have invariably got into hot water. As an illustration I will give my experience on joining this Company at Portsmouth, where a Battalion was mobilized for Ireland. On the Sunday morning we were all on parade, and the various denominations were formed into different parties. I was alone (although I knew of three who were Freethinkers), when a Jew fell in alongside me. I told him I was an Atheist and took a few paces from him, still he wished to come with me, he evidently did not like to be made a public exhibition of, neither did I; but some must make a stand. Along came R. S. M. with the O. C., and, in a loud voice said—referring to me: "This man doesn't believe in anything." The officer asked me my religion. I said: "I am an Atheist, and, probably, believe in more things than the S-M, only our tastes differ." I am pleased to say that I have got on very well with all the officers ever since, and the Jew corporal has stuck to me ever since, and claims me as his special friend, he is very loyal to his religion, but I think I have got him "guessing," as the Americans say, especially about souls, spirits, ghosts, etc.

I am pleased to say that I have been very successful in convincing my colleagues on the absolute fallacy of religion. Many at first I could not induce to read the *Freethinker*, but now I hardly get a chance to read it myself, and then it goes on board one or other of our patrol boats here. I had a lot of back issues at home so I had them sent on to me for distribution.

A discussion is to take place to-day (September 29) at Parliament Hill, North London, between Mr. E. Burke and Mr. Muir of the C.E.S., on "Free Will and Determinism." There is room on Parliament Hill for a large audience, and we hope to hear that it was present. The discussion commences at 3.15.

There is good raw material in the intellectual and emotional make-up of a small book of verse which we have just received, *The Everlasting Quest and Other Poems*, by John Roebuck (Avery & Co., 105 King Street, Aberdeen). But, unfortunately, ideas and feelings in their raw state are not poetry; they need to be wrought into things of beauty, and this means much hard work, directed by a fine or fastidious taste. To be quite frank—Mr. Roebuck will appreciate the compliment to his talent implied in our candour—the more ambitious of the poems come considerably short of the standard by which we judge poetry. The poem that gives the title to the book, the sonnets, and the other verses in rhymed pentametric metre, are noticeably weak on the



technical side. Mr. Roebuck has not got the hang at all of this, the stateliest of English measures. It would need more space than we have now at our disposal fully to set out our objections; but if Mr. Roebuck will study Matthew Arnold's workmanship he will, no doubt, see what we are driving at. Plain living and high thinking are all to the good, yet they alone have never made a man a poet. It is the singing quality only that counts.

It is just this singing quality that we miss in Mr. Roebuck's more ambitious work; but we do get in a few of the poems. *The Hodden-Gray* is a charming fancy adequately and originally expressed; *A Ballad of Barlinnie*, although hardly a ballad, since it is rather an impression than a story, is its own recommendation. The best poem in the book, to our thinking, is *Thochts*. The poet sees in his mind's eye the hefty crofter, his wife and daughter, and wee bit of land they work; then he sees the pretentious modern mansion which has taken the place of the "canty cottage," and in the last of the four beautiful and heart-easing stanzas he sings:—

I can see a white road windin' ower to muir and past the mill,  
Past the smiddy an' the schule-house, 'cross the burnie ta the hill

Wi' the kirkie on the croon o't, an' the kirkyard on its broo:  
Eh, sirs! Tae think the three of them are a' there noo!

Mr. Roebuck will understand when we say that this lovely snatch of lyric inspiration gives us the same incommunicable thrill of æsthetic pleasure as does Mr. Yeats's *Lake Isle of Innisfree*. We can hardly give greater praise.

The uncertainty of the post is responsible for our not noting last week a meeting held by Mr. Lloyd at Blaina, Mon, on September 15. We are glad to report that the gathering was successful from every point of view, and that quite a number of intelligent questions followed the lecture. No one would welcome that kind of questioning more than Mr. Lloyd.

The Secretary of the Manchester Branch asks us to call special attention to the meeting of members to be held to-day (Sept. 29) at Bakers' Hall, 56 Swan Street, at 6.30. A good attendance is requested, in order to take effective measures for the season's campaign.

We are also asked to again remind East London Freethinkers of the outing of the West Ham Branch to take place to-day. It will take the form of a "Ramble" from Upminster to Warley. The train reaches Upminster at 10.37, and tea will be provided. "Ramblers" must bring their own lunches.

Mr. C. T. Shaw, of 64 Worcester Street, Wolverhampton, has kindly undertaken to collect waste paper in his district on our behalf. Will Freethinkers in the neighbourhood be good enough to leave their paper with Mr. Shaw, who will send on to us so soon as the quantity is large enough to be dispatched.

There is to be a meeting of South Wales Freethinkers, to forward the work of organization, at the Welsh Harp Hotel, Pontypridd, to-day (Sept. 29) at 2.30. Those in the district will please note.

### "Freethinker" Sustentation Fund.

WANT of space prevents us this week giving our usual citations from the many interesting letters received, and we must, therefore, content ourselves with taking this method of acknowledging the encouraging and congratulatory messages to hand. In our issue for September 1 we gave a statement concerning the need for our opening of this Fund, and there is no need to repeat what was then said. It is in the strictest sense a War Fund, since it was made necessary by the War, and that necessity will, we regret to say, remain so long as the War continues.

The situation does, in fact, grow more threatening instead of easier. We mentioned last week that the last rise in wages—compositors, machining, etc.—means an increase of about another £100 annually on the cost of production, so that our friends will perceive the strain is not getting lighter with the progress of the War. And we have now received notice from our paper merchants that paper is to be one penny per pound dearer on future orders.

We hinted a week or two ago at a projected development that would have been of importance to the *Freethinker* and to the Cause generally. Owing to the increased expenses mentioned, we do not feel justified with proceeding with that now, and must postpone its realization to some more favourable occasion. Meanwhile, we shall continue to pay attention to increasing the circulation of the *Freethinker*, which, we are pleased to say, is still proceeding. So far as our limited resources permit, we continue to advertise the paper in likely quarters, but in the main we are compelled to rely upon the kindly efforts of our readers. These will be gratified to learn that our printing order last week touched the highest figure yet reached, and we hope to soon exceed that. We are out for a *big* circulation, and mean to get it.

The following represents our Subscription List to date:—

#### Fourth List of Subscriptions.

Previously acknowledged, £291 3s. 3d. W. T. Newman, 2s. 6d. T. Wadsworth, £2 2s. R. Bell, 2s. 6d. E. Donat, 10s. S. Clowes, 5s. M. Needham, 3s. E. Truelove, 5s. J. Ralston, 10s. M. R. V., 6s. R. A. Downes, £1. J. G. Dobson, 5s. Pte. D. J. Evans (France), 7s. 6d. Manchester Branch N.S.S., £2 2s. J. Brodie, 3s. A. V. Templeman, £1. W. M., 4s. R. Wood, £1. T. Dixon, £1. Mrs. H. C. Shepherd, 3s. "Atheist" (Wolverhampton), 5s. J. F. Aust, 5s. J. Gair, 5s. Mrs. B. Siga, 2s. 6d. Miss A. M. Baker, £1. B. Adams, 10s. H. C. Clausen, 10s. W. Blaney, 2s. 6d. A. Halliwell, 3s. 6d. H. R. Phillips, 10s. J. R. Williams, 3s. "Blea Tarn," 5s. E. C. R., 2s. 6d. Total, 308 17s. 9d.

### The Dark Diamonds of the Earth.

#### VI.

(Concluded from p. 502.)

THE development of indigo from coal tar is an outstanding triumph of modern chemistry. This dye, dating as it does from remote times, was derived exclusively until recently from the leaves of the indigo plant. Large stretches of soil were devoted to its cultivation. So late as 1896 more than one million and a half acres of indigo plantations existed, chiefly in India, and the value of the dye stuff was about £4,000,000. But familiar is the fact that the astute Germans gradually surmounted all the obstacles they encountered, and finally elaborated indigo synthetically from coal tar. In the autumn of 1897 artificial indigo appeared on the market with sad consequences to the Indian industry. The soil under indigo cultivation in 1896 (1,583,808 acres) had shrunk in 1912-3 to 214,500 acres, while the Indian export had been reduced in value from over £3,500,000 in 1896 to a meagre £60,000 in 1913. The price of indigo dropped one-half, and the industry had fallen into the hands of the Germans. Whether the Indian plantations will ever recover their former importance is doubtful now that synthetic indigo is so cheaply produced.

In the preparation of artificial indigo naphthalene, one of the commonest constituents of coal tar provided the



basis for the succeeding processes of production. All the various transformations successively undergone by the several compounds built up during the synthesis proved easy of accomplishment save the first—the conversion of naphthalene into phthalic acid. The cost of this initial conversion threatened to prevent the commercial triumph of the undertaking when a trivial laboratory mishap served to solve the difficulty which handicapped the chemists. As Findlay states, it was due to—

the accidental breaking of a thermometer immersed in the heated mixture of naphthalene and sulphuric acid that it was discovered that mercury acts as an efficient catalyst in the conversion of naphthalene into phthalic acid and facilitates the process to such a degree as to allow it to be carried out with commercial success.

The foregoing method arose from the researches of Karl Heumann, while another productive process based on benzene is also founded on that chemist's inquiries. In company with the indigo plant, the several species of madder have been superseded by coal tar derivatives in the manufacture of dye stuffs. Anthracene oil is evolved from coal tar, and, in 1868, two continental chemists discovered that the colouring substance of madder could be prepared from anthracene. At this date some 70,000 tons of madder were each year grown in the madder fields. British imports of this pigment were then about 16,000 tons per annum, and the price was £50 per ton. Ten years later the importation of the vegetable dye had dwindled to less than 2,000 tons, while the price had sunk to £18 per ton. The cultivation of the madder plant is now almost extinct. Yet the production of this vegetable dye, which dates from early Egyptian times, was, until fifty years ago, a flourishing industry. Millions of acres long restricted to the cultivation in the East of indigo, and in Southern Europe to that of the madder plant are now available for the production of cereal and other essential crops. Two industries originally valued at several millions sterling yearly have now practically passed from the realms of husbandry into those of chemical science.

The magnitude of the synthetic madder dye manufacture is owing to its capacity for producing splendid purple, violet, black, red, and deep brown colours. The hues depend upon the mordant employed in impregnating fabrics subjected to the dyer's treatment. The colours depending on the use of madder include the most permanent kinds. One of these is the magnificent Turkey red which imparts to cotton a brilliant colour. Anthracene, the basis of these fine colours, now rapidly rose to a position of importance from a very lowly estate. To quote Professor Meldola: "In two years a material which could have been bought for a few shillings the ton advanced at the touch of chemical magic to more than 200 times its former value."

Fahlberg, in 1879, evolved from coal tar, toluene, a substance of surprising sweetness. A few years later this material was placed on a marketable basis as a flavouring substance which could be utilized in commodities that require sweetening, but in which sugar proves injurious. This, for instance, is of prime importance with the food stuffs of sufferers from diabetes. Fahlberg's product, now known as saccharin, possesses more than 400 times the sweetening power of cane sugar. This compound is very useful for several important purposes, and its value in medical treatment has secured its recognition in the Pharmacopœia. The discovery of a white crystalline powder so greatly outdistancing sugar for sweetening purposes seemed to menace the sugar industries with ruin. State intervention, however, promptly prevented the introduction of saccharin into commerce as a substitute for sugar. Licences were required for its manufacture, and the sale of this coal tar "sugar"

was restricted to the druggist. It is essential to observe, however, that while cane and beet sugar possess high nutritive properties, saccharin contains no nutritive value whatever. It is an excellent medicament, and as such it occupies a high rank.

Perfumes are prepared from coal tar. Among these are sweet woodruff, various clovers, New Mown Hay, vanillin, hawthorn blossom, meadow-sweet, and other splendidly scented compounds.

Many important drugs are now derived from coal tar. Antipyrine is elaborated from aniline, which is itself evolved from benzene. From antipyrine was subsequently derived another important antipyretic—pyramidone; while a further derivative, antifebrine, has proved itself a useful febrifuge.

From the sinister activities of a micro-organism, the *Spirochete pallida*, the venereal disease syphilis is generated. Ever since the Middle Ages, mercury has been regarded as a specific for this malady. Mercury, however, proves detrimental to the patient. Professor Ehrlich therefore endeavoured to evolve a compound containing some toxic substance which would be absorbed by the microbe but not by the tissues of the sufferer from the disease. After a long series of experiments, Salvarsan, the famous 606, emerged. This preparation, now available in Britain under the name of Kharsivan, is a benzene derivative, and consequently a coal tar product, although arsenic is also added to the compound.

The principle of selective absorption which guided Ehrlich in his researches has led to later victories. Dr. Browning's discovery that trypan-flavine, one of the coal tar dyes, possesses the remarkable property of destroying blood-poisoning bacteria while remaining harmless to the white blood corpuscles or "warrior cells" which form the natural defences of the body when attacked by disease, has promoted the use of this compound as an antiseptic. Obviously, a germicide which selects as its foes the malign microbes alone is far superior to ordinary antiseptics that slay "with equal impartiality the pathogenic organisms and their natural enemies, the white 'warrior cells.'"

When, in 1914, the World War opened, Germany's almost complete monopoly of the production and supply of synthetic drugs became painfully apparent. In a most instructive table, Professor Findlay shows the serious rise in prices which this drug famine occasioned. There we find that phenacetin, priced at 2s. 9d. in 1914, rose in January, 1917, to 92s. 6d. per pound. Salol, which was selling at 1s. 10d. before the War, advanced to 47s. per pound in 1916, although it has since fallen to 10s. 6d. Generally speaking, there has been a marked decline in the price of drugs since 1916, the year of highest prices. This fall is due to the labours of our chemists, seconded by increased supplies from America and elsewhere. For a time the situation was very critical, and perhaps the experience has not been in vain.

Of the services rendered by coal tar derivatives to photography and to various other arts there is no space to speak. The writer trusts that no apology is needed for this short series of papers on the apparently prosaic subject of coal. To him science and Freethought are indissolubly linked, and he earnestly subscribes to the view expressed by one of our most thoughtful chemists that—

until the imagination of our people can be fired by the mental contemplation of great chemical achievements we shall never be able to gain for chemistry and for chemical study that measure of interest, respect, recognition, and encouragement which alone will enable this country to hold her own in the industrial competition of the world.

T. F. PALMER.



## Writers and Readers.

PROFESSOR C. H. HERFORD ON LUCRETIVUS.

A FRIEND of mine with an admirable bias towards clear thinking reminds me that Lucretius, the great freethinking poet of old Rome, has always attracted strong and independent minds. A glance at the subject will be sufficient to show the justness of his remark. Those of my readers who know their Montaigne well will, no doubt, recall a passage in which he expresses his delight in the natural and sustained vigour of the Latin poets, whose manner of writing, he says, "does not so much please, as fill and ravish the strongest minds." After quoting some magnificent lines from Lucretius, he goes on: "When I behold these brave forms of expression, so vivid, so profound, I am inclined to say not that it is well said, but that it is well thought." That is the truth in a nutshell. But it was not so much the thought as the expression that appealed to Dryden, whose robust and matter-of-fact temperament found little interest in philosophical speculation. His versions of a few of the more famous passages give some of the fullness, the sonority, and dignified progress of the Latin hexameter. Yet it is hopeless to try to reproduce in English the closely packed thought of the original. Voltaire, Diderot, and Frederick the Great saw in Lucretius the impassioned opponent of religion and priesthood. Their delight was not in the brilliant episodes, but in the firm logical texture of the great third book, in which is marshalled all the evidence for disbelief in the immortal nature of the human mind. In the last century, in that mid-Victorian period dishonoured and abused by every young criticaster nowadays, Munro published his text, commentary, and translation—a monument of sane and enthusiastic scholarship; J. A. Symonds wrote a luminous and eloquent study of the poet's ideas and style, and Goldwin Smith occupied his scholarly leisure by turning, or, rather, expanding, a few passages into excellent English stanzas. Gladstone could quote with effect the "noble and majestic lines" (Bk. ii., 646-651) in his speech on the Affirmation Bill, his commendation moving a pious member of the House to protest that the poetry of Lucretius was "only less objectionable than Mr. Bradlaugh's writings."

Only a little while ago some of us were delighted to find Lord Morley checking the flow of his recollections to give us a discussion on the merits of the Roman philosopher-poet, and now Professor C. H. Herford, a man of letters, whose work reveals both vision and depth, has printed a lecture delivered in 1917 at the "John Rylands Library" in Manchester. As an introduction to Lucretius, it is well worth buying. With it and Munro's prose version—obtainable, I believe, in a cheap reprint—the English reader has some of the materials for appreciating the thought, and to a limited extent the style, of a great poet and a great Freethinker. Mr. Herford begins by noting that Lessing denied the title of poet to Lucretius because Aristotle had said that there could be no poetry worthy the name that was not the imitation of human actions. This was the eighteenth century standpoint. The Romantic Revival levelled these Aristotelian entanglements of critical barbed-wire, and extended the domain of poetry so as to embrace all human emotions. It is to Wordsworth rather than to Lessing that we turn for an adequate theory of poetry. For him poetry is the "spontaneous overflow of powerful feelings; the impassioned expression which is in the countenance of all science." For Lessing, as I have said, Lucretius was a mere versifier, because he did not imitate human action; yet if we dig deep enough, we shall find that "On the Nature of Things" has an epic grandeur. The characters are not men and women, it is true, but the immense forces of Universal Life. On the same ground, Lessing would have denied the name of poet to James Thomson ("B.V."), whose "City of Dreadful Night" is based, not on the interplay and clash of human actions, but on powerful and spontaneous emotions remembered in tranquillity. Goethe, Mr. Herford notes, owed much to the dry light of Lessing's admirably analytic method, and yet he rejected at once his narrow view of poetry; and, what is more to the point, he gave Lessing's theory a practical denial by writing a fine poem on "The Metamorphosis of Plants."

Mr. Herford tells us that "On the Nature of Things" is "at once a scientific treatise, a gospel of salvation, and an epic of nature and of man," and also that we are rarely conscious of one of these aims to the exclusion of the others. In none of these was Lucretius original. He got his science from Democritus, his way of salvation from Epicurus, while his master in philosophic poetry was Empedocles, the "poet-philosopher of Agrigentum, whom Matthew Arnold made the mouthpiece of his grave and lofty hymn of nineteenth century pessimism." The atomic theory of Democritus, a contemporary of Socrates, was an attempt to explain the universe by combinations of material particles, indivisible, and therefore indestructible, coming together fortuitously, and moving in a vacuum. It is a fruitful hypothesis, the possibilities of which are not by a long way exhausted. It has the advantage of leading directly to Atheism. This system was adopted by Epicurus, a philosophic and gentle recluse, who had little or no interest in its speculative aspect. For him it was valuable because it promised, as Mr. Herford says, an "effective relief from disturbing interests and cares, and especially from the fear of the gods, and a life after death." This was the gospel of salvation from superstition, which Lucretius embraced with the fervour of a disciple.

He was not like Pope, in the *Essay on Man*, providing an elegant dress for philosophic ideas which he only half understood and abandoned in alarm when they threatened to be dangerous. He was the prophet of Epicureanism, and it is among the prophets of the faiths by which men live and die that we must seek a parallel to the passionate earnestness with which he proclaims the daring gospel of Epicurus..... What we admire unreservedly in him, declares a great French poet, who died only the other day—Sully-Prudhomme—is the breath of independence which sweeps through the entire work of this most robust and precise of poets.

Epicurus, the "timid and debonnaire humanitarian, the quietist of paganism" in the imagination of the Roman poet, becomes a large heroic figure—a new Prometheus—whom neither the story of gods, nor thunderbolts, nor heaven with threatening roar, could quell; who passed beyond the flaming boundaries of the world, and traversed in mind and spirit the whole unmeasurable universe, returning a conqueror to tell us what can, what cannot, come into being; under whose feet in turn foul religion lay prostrate, and whose victory has raised human nature to the skies. It is precisely this upward lift—this passionate faith in the free play of the mind that converts what might have been a didactic treatise into an epic song of the world-wide conflict between reason and religion. The great passages, moreover, are not, as some would have us think, mere pleasant oases in an arid waste of expository science. They are as much a part of the tissue of the poem as are the more emotional, the more lyrical passages of (say) *Romeo and Juliet*. And as you will get no idea of the play by merely picking out a great scene here and there, so you will get no idea of the immense intellectual and emotional cogency of the *De Rerum Natura* if you confine your reading to selections.

Mr. Herford notes that most of the recognized and famous poetry of the book is connected with the negative side of the subject—the annihilating criticism of religion based on fear of the gods, fear of death, and of what may happen to us after death. How surcharged with the emotions of indignation and pity is the famous passage in which he tells of the slaughter of Iphigenia on the altar of Artemis! (I. 84-101):

Lo! on her tresses fair for bridal tire  
The sacrificial fillet they have bound;  
Beside the altar weeping stands her sire:  
In all the crowd no tearless eye is found.  
The priests make ready for their office dire,  
Yet pitying hide the knife. When gazing round  
The Maiden sees her doom, her spirit dies,  
Her limbs sink down, speechless on earth she lies.  
The first born of his children she in vain  
Had brought the name of father to the king.  
In arms upborne she goes, not by a train  
Of youths that the loud hymeneal sing  
Around a happy bride in joyous strain  
Bearing her home, but a sad offering,  
There to be slain by him who gave her birth.  
Such evil hath Religion wrought on earth.



How impressive is the magnificent close of the third book (lines 820 *ad fin.*) where he brings all he had of philosophy and science irradiated with ardent emotion to prove that the long night of the grave can be no more painful than the eternity before our birth! The personification of nature as the Eternal Mother of men who rebukes them for bemoaning an ineluctable fate is as moving as it is solemn. Its solemnity with that of other similar personifications have led critics, who could not see that Lucretius was both a poet and a man of science, to argue that he was in this way seeking after the comfort and support of a personal deity. What would they say to Meredith's rehabilitation of the Earth Goddess?

On the sadness of Lucretius—the sense of the “tragic pathos of sudden doom and inexorable passing away.” Mr. Herford has an exquisitely phrased passage:—

To say that he puts the “Nevermore” of romantic sensibility in the place of the dispassionate “give and take” of mechanics would do wrong to the immense vitality which animates every line of this athlete among poets. Of the cheap melancholy of discontent he knows as little as of the cheap satisfaction of complacency, or of that literary melancholy, where the sigh of Horace, or Rousard, or Herrick, over the passing of roses and all other beautiful things covers a sly diplomatic appeal to the human rosebud to be gathered while still there is time. No, the melancholy of Lucretius is like that of Durer's *Melancholia*, the sadness of strong intellect and far-reaching vision as it contemplates the setting of the sun of time and the ebbing of the tides of mortality; or, like Wordsworth's mournful music of dissolution, only to be heard by an ear emancipated from vulgar joys and fears; or, like the melancholy of Keats,—the veiled goddess who hath her shrine in the very temple of delight,—the *amari aliquid*, in Lucretius's own yet more pregnant words, which lurks in the very sweetness of the flower (p. 25).

GEO. UNDERWOOD.

### Correspondence.

#### MIND AND MATTER.

TO THE EDITOR OF THE “FREETHINKER.”

SIR,—Professor Tyndall's difficulty in seeing how thought is to be accounted for by the action of the brain presents itself, to my mind, in this way. All material phenomena may be thought of in terms of extension and movement; they are all cases of something occupying space and moving. Extension and movement, then, are universal attributes of matter. Now, consciousness cannot be thought of at all in these terms, and being, therefore, inexplicable in terms of those attributes of matter which we derive from our experience of physical phenomena, it must, I think, be admitted that a real difficulty exists for the Materialist to face. This, however, does not, in my judgment, weaken the case for Materialism. On the contrary, I think it is strengthened by candidly recognizing difficulties which appear insuperable to its opponents.

After all, other systems have their own peculiar difficulties. The Dualists, for instance, have to account for the supposed interaction of two substances (matter and spirit) which have nothing in common but duration. This seems to me just as impossible as it is to think of spirits existing apart from matter.

There remains Idealism, the only monistic system which I regard as fundamentally opposed to Materialism. With regard to that, it seems to me that if I deny the existence of material things, except as perceptions, I should also deny the existence of people other than myself, since I only know them directly as material bodies. Their consciousness I infer from their physical manifestations, and if these exist only in my mind, so must that which is derived therefrom.

My idea is that matter has an attribute of a psychic nature that, under certain conditions, gives rise to consciousness, but that this attribute is undiscoverable from phenomena for the same reason that we can only know of the consciousness of others indirectly through physical means. In other words, I believe that not only organisms, but matter in general, has a subjective as well as an objective side.

E. J. HIRST.

### SUNDAY LECTURE NOTICES, Etc.

Notices of Lectures, etc., must reach us by first post on Tuesday and be marked “Lecture Notice” if not sent on postcard.

#### LONDON.

##### INDOOR.

SOUTH PLACE ETHICAL SOCIETY (South Place, Moorgate Street, E.C.): 11, John A. Hobson, M.A., “The Ethics of Post-War Finance.”

SOUTH LONDON BRANCH N. S. S. (Trade Union Hall, 30 Brixton Road, S.W., near Kennington Oval): 7.30, Special General Meeting.

##### OUTDOOR.

BATTERSEA BRANCH N. S. S. (Battersea Park Gates, Queen's Road): 11.45, A Lecture.

BETHNAL GREEN BRANCH N. S. S. (Victoria Park, near the Bandstand): 6.15, A Lecture.

NORTH LONDON BRANCH N. S. S. (Parliament Hill Fields): 3.15, Debate, Mr. Percy H. Muir, C.E.S., and Mr. E. Burke, “Freewill or Determinism?” 6, Mr. E. Burke, “Charles Bradlaugh: In Memoriam.”

REGENT'S PARK BRANCH N. S. S.: 5.30, H. Brougham Doughty, “Charles Bradlaugh” (Second Address).

WEST HAM BRANCH N. S. S. (Maryland Point Station): 7, A Lecture.

HYDE PARK: 11.30, Mr. Saphin; 3.15, Messrs. Dales, Swasey, and Shaller.

#### COUNTRY.

##### INDOOR.

BIRMINGHAM BRANCH N. S. S. (Repertory Theatre, Station Street): 7, Mr. J. T. Lloyd, “The Value of the Bible in National Life.”

FAILSWORTH SECULAR SOCIETY (Secular Sunday-school, Pole Lane, Failsworth): Miss K. B. Kough, 2.45, “Are we still Savages”; 6.30, “Marriage: As it is, As it was, and As it might be.” Music by the Choir. Tea prepared for friends from a distance.

LEICESTER SECULAR SOCIETY (Secular Hall, Humberstone Gate): 6.30, Mr. Shapurji Saklatvala, “Economic Conditions of Labour in India.”

MANCHESTER BRANCH N. S. S. (Baker's Hall, 56 Swan Street): 6.30, Meeting of Members for arrangement of Winter Work. A good attendance is earnestly requested.

SOUTHAMPTON BRANCH N. S. S. (Waverley Hall, St. Mary's Road): Mr. Chapman Cohen, 11, “The Savage in our Midst”; 7, “The New World and the Old Religion.”

SWANSEA AND DISTRICT BRANCH N. S. S. (60 Alexandra Road): 6.30, Branch Meeting.

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